



#4 IDS  
D. Townsend  
10/08/02

PATENT  
Docket No. 110.01760101

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Iwao Iwasaki	)	Group Art Unit:	3653
		)		
Serial No.:	10/081,176	)	Examiner:	Unknown
Confirmation No.:	2734	)		
		)		
Filed:	Feb. 22, 2002	)		
		)		
For:	<u>SEPARATION APPARATUS AND METHODS</u>			

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
P.O. Box 2327  
Arlington, VA 22202

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SEP 04 2002

Sir:

GROUP 3600

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with C.F.R. §§ 1.97 *et. seq.*, the materials enclosed herewith are brought to the attention of the Examiner as possibly being of interest in connection with the above-identified patent application. Consideration of each of the documents listed on the attached 1449 forms is respectfully requested. Pursuant to the provisions of M.P.E.P. § 609, Applicant further requests that a copy of the 1449 forms, marked as being considered and initialed by the Examiner, be returned with the next Official Communication.

It is believed that no fee is due, as this Information Disclosure Statement is filed prior to the receipt of any Action on the merits. However, in the event a fee is due, please charge any fee or credit any overpayment to Account No. 13-4895.

**Information Disclosure Statement**

Page 2 of 2

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Serial No.: 10/081,176  
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For: SEPARATION APPARATUS AND METHODS

The Examiner is invited to contact Applicant's Representatives at the below-listed telephone number, if they can be of any assistance during prosecution of the present application.

Respectfully submitted for

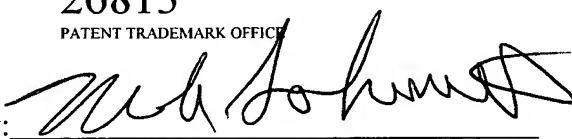
**Iwao Iwasaki**

By  
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Phone: (612)305-1220  
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Customer Number 26813



26813

PATENT TRADEMARK OFFICE

By:   
Mark J. Gebhardt  
Reg. No. 35,518  
Direct Dial (612)305-1216

**CERTIFICATE UNDER 37 C.F.R. 1.8:**

The undersigned hereby certifies that this paper is being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Assistant Commissioner for Patents, P.O. Box 2327, Arlington, VA 22202, on this 26<sup>th</sup> day of August, 2002.


  
Mark J. Gebhardt

26 Aug 2002  
Date

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<b>INFORMATION DISCLOSURE STATEMENT</b>  	Atty. Docket No.: 110.01760101	Serial No.: 10/081,176
	Applicant: Iwao Iwasaki	Confirmation No.: 2734
	Application Filing Date: Feb. 22, 2002	Group: 3653
	Information Disclosure Statement mailed: Aug. <u>26</u> , 2002	

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	2,364,777	12/12/44	Brown et al.			
	2,364,778	12/12/44	Brown et al.			
	2,450,720	10/05/48	De Vaney			
	2,468,586	04/26/49	Braund			
	3,292,780	12/20/66	Frommer et al.			
	4,186,087	01/29/80	Kato			
	4,192,738	03/11/80	Colombo et al.			
	4,298,169	11/03/81	Iwasaki			
	4,301,973	11/24/81	Lai			
	4,643,822	02/17/87	Parsonage			
	4,735,707	04/05/88	Bustamante			
	5,307,938	05/03/94	Lillmars			
	5,507,393	04/16/96	Yang			
	5,551,574	09/03/96	Hicks et al.			
	6,056,125	05/02/00	Lai et al.			
	6,273,265 B1	08/14/01	Greenwalt			

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GROUP 3600

**FOREIGN PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
	None						

<b>EXAMINER</b>	<b>Date Considered</b>
<p>*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>	

**INFORMATION  
DISCLOSURE  
STATEMENT**

AUG 29 2002

Atty. Docket No.: 110.01760101

Serial No.: 10/081,176

Applicant: Iwao Iwasaki

Confirmation No.: 2734

Application Filing Date: Feb. 22, 2002

Group: 3653

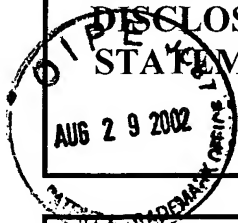
Information Disclosure Statement mailed: Aug. 26, 2002
**OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)**

Examiner Initial	Document Description
	Arbiter et al., "Attritioning and Conditioning in Spodumene Flotation," <i>Quarterly of the Colorado School of Mines</i> , 1961 July; 56(3): 321-332.
	Ersayin et al., "Magnetically Enhanced Hydroseparator," MEGS, 2001, Falmouth, UK, June 19-21, 2001, presentation slides and abstract, 25 pgs.
	Iwasaki, "Design of a Magnetic Field Distribution Device for Application in Hydroseparators and Flotation Cells," Progress Report No. 2, Coleraine Minerals Research Laboratory, Natural Resources Research Institute, Univ. of Minnesota-Duluth, CMRL/TR-01-06, NRRI/TR-2001/16, 2001 May 2 (released to public 27 Feb. 2002); 10 pgs.
	Iwasaki et al., "Effect of Magnetizing/ Demagnetizing on Cationic Silica Flotation Under a Magnetic Field," Final Report, Coleraine Minerals Research Laboratory, Natural Resources Research Institute, Univ. of Minnesota-Duluth, CMRL/TR-01-20, NRRI/TR-2002/04, 2001 Oct. 17 (released to public 27 Feb. 2002); 8 pgs.
	Iwasaki et al., "Magnetic Field Application in Cationic Silica Flotation," Final Report, Coleraine Minerals Research Laboratory, Natural Resources Research Institute, Univ. of Minnesota-Duluth, CMRL/TR-01-04, NRRI/TR-2001/14, 2001 May 4 (released to public 27 Feb. 2002); 1-39.
	Iwasaki et al., "Magnetic field application in hydroseparators," Final Report with Addendum, Coleraine Minerals Research Laboratory, Natural Resources Research Institute, University of Minnesota-Duluth, CMRL/TR-01-04, NRRI/TR-2001/14, 2001 Apr. 25; addendum dated 2001 May 25 (released to public 27 Feb. 2002); 43 pgs.
	Iwasaki et al., "Magnetic Field application in hydroseparators and flotation cells," Progress Report No. 1, Coleraine Minerals Research Laboratory, Natural Resources Research Institute, Univ. of Minnesota-Duluth, CMRL/TR-0012, NRRI/TR-2000/38, 2001 Aug. 10 (released to public 27 Feb. 2002); 22 pgs.
	Quarterly Report, Natural Resources Research Institute, Oct.-Dec. 2000; 1 pg.
	Quarterly Report, Natural Resources Research Institute, Jan.-Mar. 2001; 1 pg.
	Quarterly Report, Natural Resources Research Institute, Apr.-June 2001; 1 pg.

EXAMINER

Date Considered

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 AUG 29 2002

Atty. Docket No.: 110.01760101

Serial No.: 10/081,176

Applicant: Iwao Iwasaki

Confirmation No.: 2734

Application Filing Date: Feb. 22, 2002

Group: 3653

Information Disclosure Statement mailed: Aug. 26, 2002

Examiner Initial	Document Description
	Roe, <i>Iron Ore Beneficiation</i> , Minerals Publishing Co., Lake Bluff, Ill., 1957; 159.
	Roe, "The Magnetic Reflux Classifier," <i>Mining Engineering</i> , 1953 Mar.; 5:312-315.
	Seetharama et al., "Part 1: Magnetite Depressant Reagent Development. Section 4: Effect of Magnetic Fields in the Flotation of Magnetic Concentrates," <i>Investigation into Production of Iron Ore Concentrates wiht Less Than 3 Percent Silica from Minnesota Taconites</i> , Final Report to the State of Minnesota and the American Iron and Steel Institute, Department of Civil and Mineral Engineering, Univ. of Minnesota, Minneapolis, MN, 1991 Oct. 15; 31 pgs.
	2002 SME Annual Meeting & Exhibit, Technical Program 2002 Feb. 25-27 (available to public Nov. 2001); Phoenix, AZ, (2 pgs.).
	Sonolika et al., "Chapter 33: Effect of Magnetic Field on Column Flotation of Ore Containing Magnetic Content," <i>Column Flotation '88</i> , Sastry Ed., SME Annual Meeting, Phoenix, AZ, January 25-28, 1988; 299-304.
	Wu et al., "The Flotation of Taconite in a Magnetic Field," Proceedings of 68 <sup>th</sup> Annual Meeting, Minnesota Section SME, and 56 <sup>th</sup> Mining Symposium, Univ. of Minnesota, Center for Professional Development, Univ. of Minnesota-Duluth, 1995 Jan. 24-26; 245-256.

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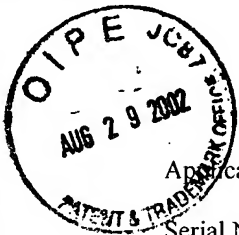
SEP 04 2002

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3653

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Iwao Iwasaki

Group Art Unit: 3653

Serial No.: 10/081,176

Examiner: Unknown

Filed: Feb. 22, 2002

Docket No.: 110.01760101

Confirmation No.: 2734

Title: SEPARATION APPARATUS AND METHODS

Assistant Commissioner for Patents

P.O. Box 2327

Arlington, VA 22202

We are transmitting the following documents along with this Transmittal Sheet (which is submitted in triplicate):

- ☒ An itemized return postcard.  
☐ A Petition for Extension of Time for \_\_ month(s) and a check in the amount of \$\_\_ for the required fee.  
☒ An Information Disclosure Statement (2 pgs); 1449 forms (3 pgs); and copies of 32 documents cited on the 1449 forms.  
☐ A check in the amount of \$\_\_, representing \_\_\_\_.  
☐ A certified copy of a \_\_ application, Serial No. \_\_, filed \_\_\_\_\_, the right of priority of which is claimed under 35 U.S.C. §119.  
☐ Other: \_\_\_\_.  
☐ Amendment ☐ No Additional fee is required. ☐ The fee has been calculated as shown:

Fee Calculation for Claims Pending After Amendment					
	Pending Claims after Amendment (1)	Claims Paid for Earlier (2)	Number of Additional Claims (1-2)	Cost per Additional Claim	Additional Fees Required
Total Claims				x \$9 =	
Independent Claims				x \$42 =	
One or More New Multiple Dependent Claims Presented? If Yes, Add \$140 Here →					
Total Additional Claim Fees Required					

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 13-4895. Triplicate copies of this sheet are enclosed.

**CERTIFICATE UNDER 37 C.F.R. §1.8:** The undersigned hereby certifies that this Transmittal Letter and the paper(s), as described hereinabove, are being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Assistant Commissioner for Patents, P.O. Box 2327, Arlington, VA 22202, on this 26<sup>th</sup> day of August, 2002.

MUETING, RAASCH &amp; GEBHARDT, P.A.

Customer Number: 26813



26813

PATENT TRADEMARK OFFICE

By:

Name: Mark J. Gebhardt

Reg. No.: 35,518

Direct Dial: 612-305-1216

Facsimile: 612-305-1228

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